

Date: Wednesday, 9/13/2006 4:26:22 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206 A/B HIGH GEAR SKIDTUBE
Job Number	: 28514		
Estimate Number	: 10170		
P.O. Number	: N/A	Part Number	: D206642212
This Issue	: 9/13/2006	S.O. No.	: N/A
Prsht Rev.	: NC	Drawing Number	: N/A
First Issue	: N/A	Project Number	: N/A
Previous Run	: 28155	Drawing Revision	: N/A
	Type	Material	: N/A
	: LANDING GEAR	Due Date	: 10/6/2006
Written By	: <u>[Signature]</u>	Qty:	1
Checked & Approved By	: <u>[Signature]</u>	Um:	Each
Comment	: Est Rev:K 05.07.14 ECN 847 & 901; Add Tow Ring and GHW Kit KJ/CP/JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL
 Photocopy bluefile & type labels per PPP206-642-212 CHG004

KJ 06-09-19 (1)

2.0	28514A	HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B
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Comment: Sub-Component HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B
 D206-642-241 B 28154A

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1
 Pick Packing Kit

4.0	D206651041	206 A/B GHW Kit
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
 Pick: Packing Kit

✓	Qty	Part Number	Description	Batch
✓	1	D206-651-041	GHW Kit	24197-
✓	1	D206-642-241(REF)		28154A

5.0	D2652	Bushing
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Comment: Qty.: 16.0000 Each(s)/Unit Total : 16.0000 Each(s)
 Pick: Packing Kit

✓	Qty	Part Number	Description	Batch
✓	16	D2652	Bushing	B28252

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Job Number: 28514

Part Number: D206642212

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

D2655

Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 1 D2655

Tow Ring

327110 -

7.0

D26652

Saddle, RH, Fwd,Aft, Out



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 2 D2665-2

Saddle

323521 -

8.0

D26662

Saddle, RH, Fwd,Aft, In



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 2 D2666-2

Saddle

25981 -

9.0

D2712

Set Screw



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 10 D2712

Set Screw

326481 -

10.0

D2884

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description

Batch

✓ 2 D2884

SADDLE SPACER

328259 -

11.0

D2885

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

✓ Saddle Spacer

327969 -

W/O:		WORK ORDER CHANGES					
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Job Number: 28514

Part Number: D206642212

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

AN341A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

8 AN3-41A

Bolt M102339-

13.0

AN45A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

1 AN4-5A

Bolt M100857-

14.0

AN46A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

12 AN4-6A

Bolt M101418-

15.0

AN57A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

4 AN5-7A

Bolt M102140-

16.0

AN511A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

4 AN5-11A

Bolt M102407-

17.0

AN644A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

2 AN6-44A

Bolt M100442-

W/O:		WORK ORDER CHANGES					
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Job Number: 28514

Part Number: D206642212

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

AN960JD10

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 8 AN960JD10 Washer M122743-

19.0

AN960JD416

Washer



Comment: Qty.: 25.0000 Each(s)/Unit Total : 25.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 25 AN960JD416 Washer M122339-

20.0

AN960JD516

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 8 AN960JD516 Washer M122328-

21.0

AN960JD616

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 4 AN960JD616 Washer M101824-

22.0

MS21042L3

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 8 MS21042L3 Nut (or -3) M101912-

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/11/15
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Customer: CU-DAR001 Dart Helicopters Services

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Job Number: 28514

Part Number: D206642212

Job Number:



Seq. #:

Machine Or Operation:

Description :

23.0

MS21042L4

Nut



Comment: Qty.: 12.0000 Each(s)/Unit Total: 12.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 12 MS21042L4 Nut (or -4) M19185

24.0

MS21042L6

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

✓ 2 MS21042L6 Nut (or -6) M100151

25.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

26.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-642-212

Location:

PPP Rev:

D LB 06/11/14 ①

27.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



LB 06/11/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B
 Job Number : 28514A
 Estimate Number : 10163
 P.O. Number : N/A Part Number : D206642241
 This Issue : 9/13/2006 S.O. No. : N/A Drawing Number : D2650 REV E P1,3
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : LANDING GEAR Drawing Revision : E
 Previous Run : 28385A Material : N/A
 Due Date : 10/6/2006 Qty: 1 Um: Each
 Written By :
 Checked & Approved By :
 Comment : Est Rev:M 04.12.02 Revised procedural steps KJ/JLM

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	DC	DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D206-642-241

CHG003

KS 06.09.23 (1)

2.0

D2620

Bent 206 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D2620	Bent Tube 3" OD	B28457

DP 6-9-19

3.0

D32861

Doubler



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
2	D3286-1	Doubler	B27594

3E 06-10-06

4.0

D2647

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D2647	Fwd Cap	B24842

BE 06-09-19

5.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube

DP 6-9-19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A7

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description :

2- Remove ridge on inside of Fwd edge of tube as per Dwg D2650

DP 6-9-19

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

Pick:

Qty Part Number Description Batch

A/R Aluminum Rod M101010 / M101655 BE 6-9-19

4-Grind weld flush to cap on top surface only. PM 06-9-20 ①

5-Cut Aft end as per dwg 2650 from front of tube and Deburr PM 06-9-20 ①

6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D2650 BE 06-10-05 ①

7-Open holes for Aft end cap as per Dwg D2650 with #30 Drill Bit using DT8025. BE 06-10-05 ①

8-Drill pilot holes using Dt 8167. BE 06-10-05 ①

9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support. BE 06-10-06

10- Drill D3286-1 doubler rivet holes in tube using # 40 drill, spot drilling doubler at the same time. BE 06-10-06

11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads. BE 06-10-06

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D2650 BE 06-10-06

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder. BE 06-10-06

14-Remove indexing edge using DT8741 as per Dwg D2650 BE 06-10-10

15-C'sink GHW rivet holes as per Dwg D2650 BE 06-10-10

6.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

06-10-11 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A/L

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description :

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open crossbolt holes to Ø0.3125" as per Dwg D2650

BE 06-10-11

2-Drill pilot holes using DT8028-3, then open to Ø0.297" as per Dwg D2650. Open Aft cap hole #6.

BE 06-10-11

3-Deburr tube and blow out chips from inside the tube

BE 06-10-11

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

M-H 06/10/12

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Pm 06-10-170

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2650, D2650-3 Drilling Detail (without cutting fluid)

Pm 06-10-170

2-C'sink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

Pm 06-10-170

3-Deburr and blow out all chips from inside the tube

Pm 06-10-170

11.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

BE 06-10-19 (1)

12.0

CR3212404

Cherry Rivet



Comment: Qty.: 52.0000 Each(s)/Unit Total : 52.0000 Each(s)

Pick:

Qty Part Number Description Batch

52 CR3212-4-04 Rivet

M101692

BE 06-10-19 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

D26543

206 I-Beam (Web)



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2654-3

Web

B29008 Pm 06-10-20 (1)

14.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Locate, install and rivet doublers as per Dwg D2650. Micro-shave rivets as required

BE 06-10-19

2-Bond D2654-3 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting

Start Date: 06-10-20 Time: 10:15

Finish Date: 06-10-23 Time: 7:30 AM

Pick:

Qty Part Number Description Batch

A/R Sikaflex-291

m102107

Sikaflex expire date:

07-02-04

Pm 06-10-20 (6)

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06-10-23

16.0

D2649

Crossbolt Spacer



Comment: Qty.: 18.0000 Each(s)/Unit Total: 18.0000 Each(s)

Pick:

Qty Part Number

Description Batch

18 D2649

Crossbolt spacer

B228250 BE 06-10-23

17.0

D32863

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3286-3

Spacer

B24711 BE 06-10-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description :

18.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

Qty Part Number Description Batch

A/R Aluminum Rod M101010 BE 06-10-23 (1)

2-Grind welds flush as per Dwg D2650.

BE 06-10-25 (1)

3-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D2650. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/R SS Rod NONE USED BE 06-10-27

4-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D2650. Deburr

Pm' 06-10-27 (1)

19.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 CCR264SS3-3 Rivets M101938 Pm' 06-10-27 (2)

20.0

M7885343

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 M7885/3-4-3 Rivets M19099 Pm' 06-10-27 (2)

21.0

D2680041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2680-041 Nut Plate B24203 Pm' 06-10-27 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description:

22.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install D2680-041 Nut Plate as per Dwg D2650

pm 06-10-27 (1)

23.0

QC5/9

WELD INSPECTION



Comment: Inspect weld and Counterbore work to Current Step. Inspect for foreign objects as per QSI 024

24.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref. 4.3.5.1) as per QSI 005 4.3. Make sure Nut Plate Thread is protected using paint screw, and mask GHW studs.

M101575

sc

y/

06/11/03

x1

25.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

a.m 06/11/04

(1)

26.0

D26483

Wearpad



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

4 D2648-3

Wearpad

B27169

27.0

D265613

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2656-13

Wearshoe

B27739

28.0

D265621

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2656-21

Wearshoe

B27675

a.m 06/11/04

(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description :

29.0

D265633

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2656-33

Wearshoe B 28179

30.0

D34291



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3429-1

Wearpad B 29291

31.0

ALS41032130

Insert



Comment: Qty.: 44.0000 Each(s)/Unit Total: 44.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

44 ALS4-1032-130 Inserts M 18990

or (see QSI 017)

32.0

AN960JD10L

Washer



Comment: Qty.: 44.0000 Each(s)/Unit Total: 44.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

44 AN960JD10L

Washer M 100233

33.0

MS27039108

Screw



Comment: Qty.: 44.0000 Each(s)/Unit Total: 44.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

44 MS27039-1-08

Screw M 102404

a.m. 06/11/04 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 9/13/2006 4:27:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

D26511

Plug



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Pick:

Qty Part Number Description Batch

18 D2651-1 Plugs B282SI

35.0

D26513

O-Ring



Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s)

Pick:

Qty Part Number Description Batch

18 D2651-3 O-Rings B28401

36.0

MS27039406

Screw



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 MS27039-4-06 Screw M102404 M11M6874

37.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 AN960JD416 Washer M11151

a.m 06/11/04 ①

38.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1]

1- Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291

M102107

Sikaflex expire date:

02/07

2-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D2650 (D2650-3 detail). Clean excess adhesive.

3-Install MS27039-4-06 Screw as per DEO 9153.

a.m 06/11/04 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 9/13/2006 4:27:24 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description :

39.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2646 Aft Cap 328041

40.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 MS27039-1-08 Screw m102404

41.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 AN960JD10L Washer m1002B3

42.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive

A/R Sikaflex-291 m102107

Sikaflex expire date: 02/07

2-Wing Walk as per Dwg D2650-3 and QSI 005 4.4

Batch: m102098

43.0

QC3/5

INSPECT WORK/WING WALK



Comment: INSPECT WORK/WING WALK

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: PD Date: 06/11/10
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 9/13/2006 4:27:25 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HIGH GEAR SKIDTUBE ASSEMBLY 206 A/B

Job Number: 28514A

Part Number: D206642241

Job Number:



Seq. #:

Machine Or Operation:

Description :

44.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206664241 IF APPLICABLE

Location: _____

PPP Rev: _____

N/A *PV 6/11/09*

45.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Doc 11/10

Job Completion



U 20.11.10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>14</i>	DRAWN BY <i>10</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>11</i>	DRAWING NO. D2650	REV. E SHEET 1 OF 5
DATE 06.03.30		TITLE 206/407 SKIDTUBE ASSEMBLIES SCALE NTS	
A	97.03.25	NEW ISSUE	
B	97.06.26	AS MANUFACTURED CHANGES	
C	97.10.29	CHANGE HOLE PATTERN AND FRONT END	
D	04.05.17	REDRAW; INCORP. DE09136/9153/9163 MOD GROUND HNDLNG ON D2650-1/-3	
E	06.03.30	RMV C'BORE, CHG DRILL, ADD CHAMFER	

RELEASED
16 04 17 *11*

Qty -1	Qty -3	Qty -5	Qty -7	Part Number	Description
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
16	17	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

NOTES

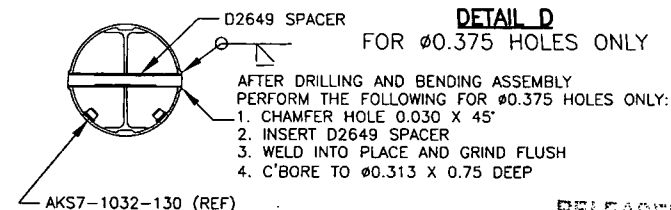
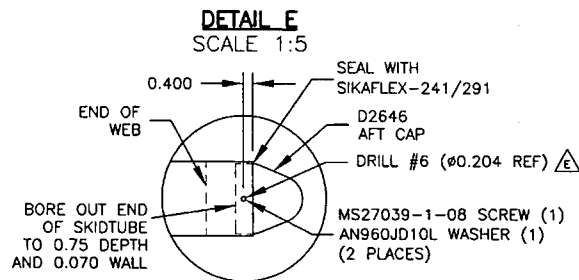
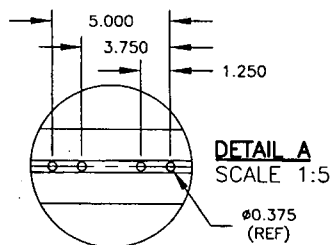
- 1) WELD PER DART QSI 004
- 2) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 3) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 4) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 5) FINISH:
 - CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
 - BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 6) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 7) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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WITHOUT NOTICE
WORK ORDER
NO. 28514A

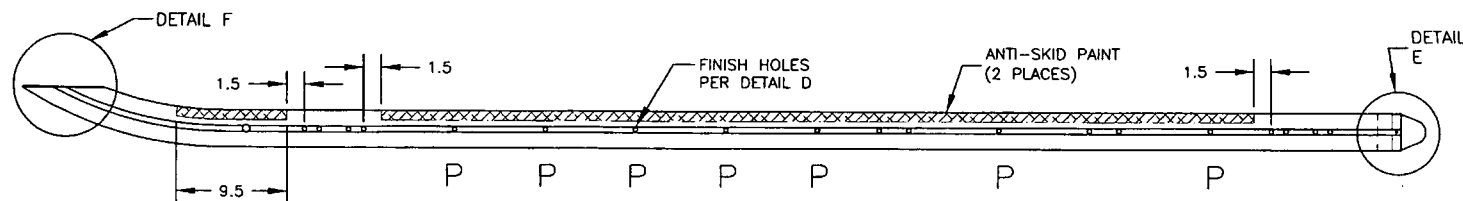
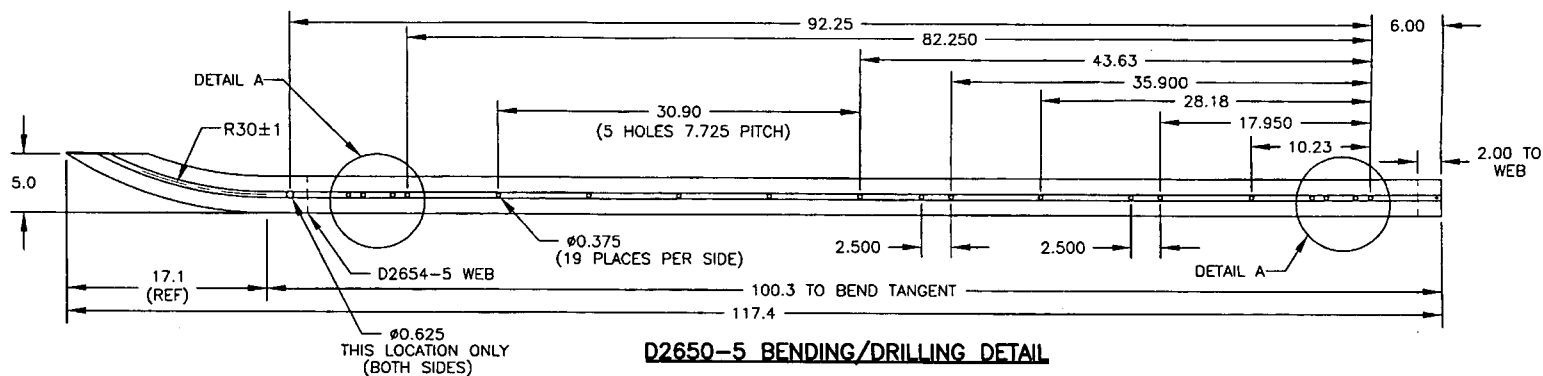
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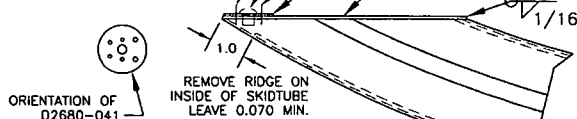
RELEASED



DETAIL F (NOT TO SCALE)

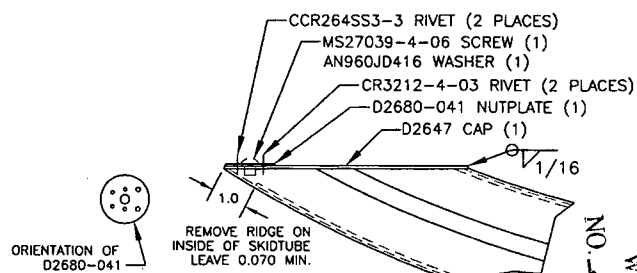
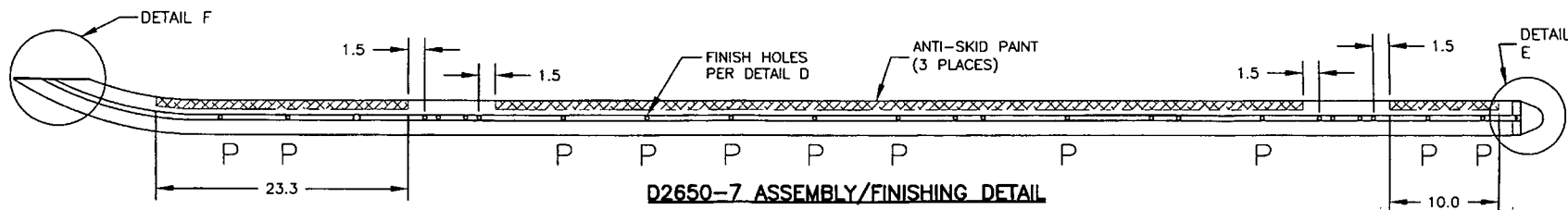
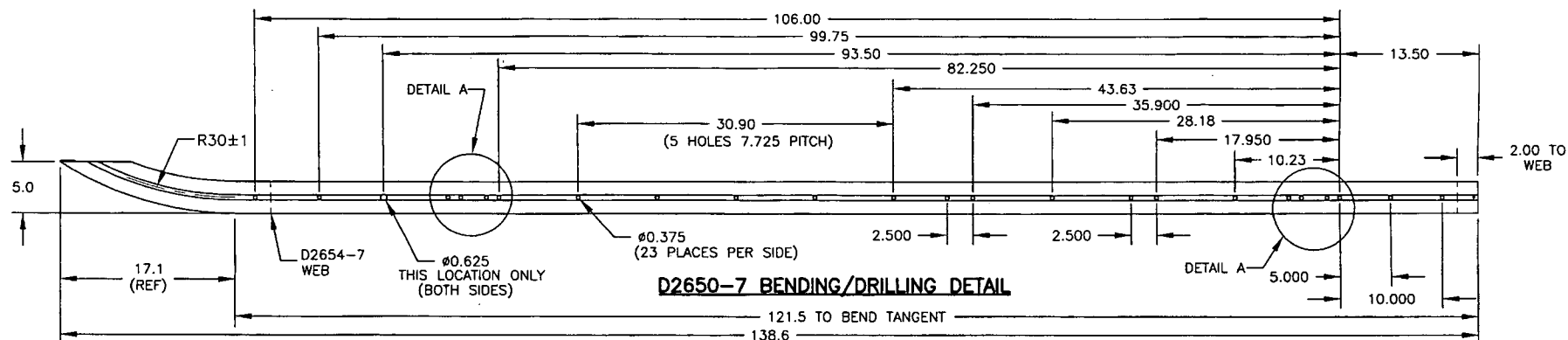
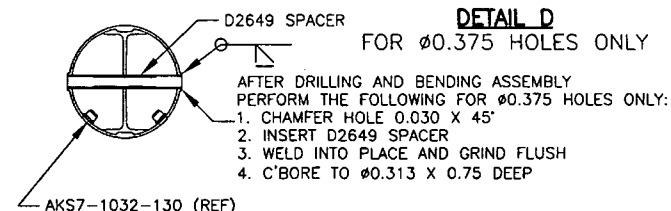
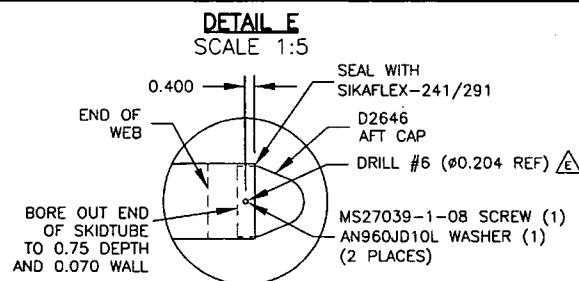
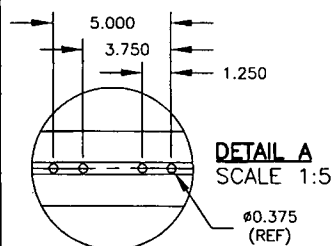
1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH



NO. 28514A
WORK ORDER
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		PH		D2650	SHEET 4 OF 5
		DATE		TITLE	SCALE
		06.03.30		SKIDTUBE	1:10



- DETAIL F (NOT TO SCALE)**
1. CUT TUBE LEVEL
 2. REMOVE RIDGE ON FWD SIDE
 3. LOCATE D2647 (TRIM AS NECESSARY)
 4. WELD D2647 IN PLACE PER DART QSI 004
 5. GRIND FLUSH
 6. RIVET D2680-041 NUT PLATE IN PLACE
- NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

NOT TO SCALE

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NOTICE

WORK ORDER

NO. 28514A

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ENGINEERING

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DESIGN	UP	DRAWN BY	UP	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA	REV. E
CHECKED	PH	APPROVED	PH	D2650	SHEET 5 OF 5
DATE	06.03.30	TITLE	SKIDTUBE	SCALE	1:10

RELEASED

0.04.17

NO. 38

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliott
Joint Welding Procedure Tig
Part number and Job number A206642241 / B28/SSA

TEST WELDS REQUIRED

BASE METAL	<u>Alum</u>	WELDING PROCESS	<u>Tig</u>
Penetration	Complete <input type="checkbox"/> Partial <input checked="" type="checkbox"/>	Single Weld <input checked="" type="checkbox"/> Double Weld <input type="checkbox"/>	
Current	AC <input checked="" type="checkbox"/> DC <input type="checkbox"/>	Backing	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
	Position	Vertical	Down <input type="checkbox"/> Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/> 2G <input type="checkbox"/> 3G <input type="checkbox"/> 4G <input type="checkbox"/>		
Tube Groove	1G <input type="checkbox"/> 2G <input type="checkbox"/> 5G <input type="checkbox"/> 6G <input type="checkbox"/>		
Sheet Fillet	1F <input type="checkbox"/> 2F <input type="checkbox"/> 3F <input type="checkbox"/> 4F <input type="checkbox"/>		
Tube Fillet	1F <input type="checkbox"/> 2F <input type="checkbox"/> 4F <input type="checkbox"/> 5F <input type="checkbox"/>		
Crossbolt Spacer	Welded into		Skidtube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 06/10/23 Qualifier Daniel Swal